A Quick Start Guide to Survey Research

Liz Carey (and hopefully many others)
2019-01-02

Contents

W	Velcome to survey research	5
Pı	Outline	7
1	Designing a survey 1.1 What is your research goal?	9 9 11
2	Writing effective survey questions	13
3	Survey Analysis 3.1 Data Cleaning	15 15
A	Setting up R A.1 Package installation	1 7 17
В	Setting up python	19

4 CONTENTS

Welcome to survey research



This book is intended to be a quick resource for conducting survey research. By no means is it intended to be comprehensive of all survey research methodologies.

6 CONTENTS

Preface

It can be difficult to find condensed and easy to read resources on survey research.

We developed this book in the hopes of future collaboration among other UX researchers.

Outline

The content of the book will include:

- Chapter 1
- Chapter 2

Prerequisites

All you need is an interest in conducting survey research, we'll assume basic knowledge, and hope to include code snippets (python and R) along the way

${\bf Acknowledgements}$

This book wouldn't be possible without the contributions of:

8 CONTENTS

Chapter 1

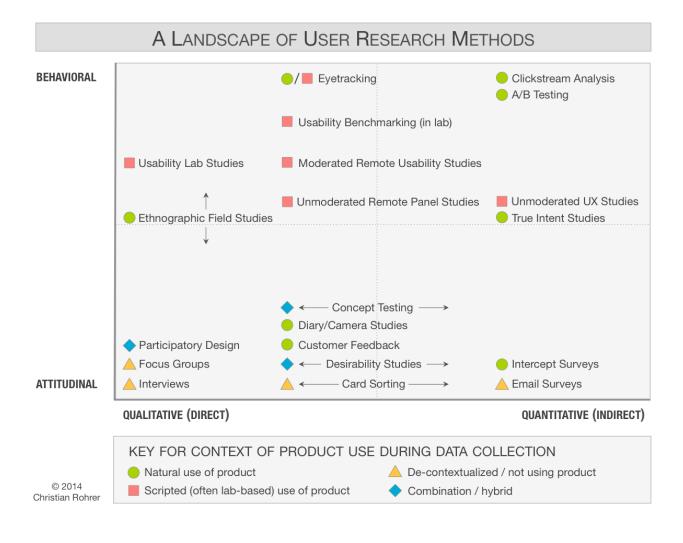
Designing a survey

1.1 What is your research goal?

First, establish if a survey is the right method to accomplish your research goal by asking yourself:

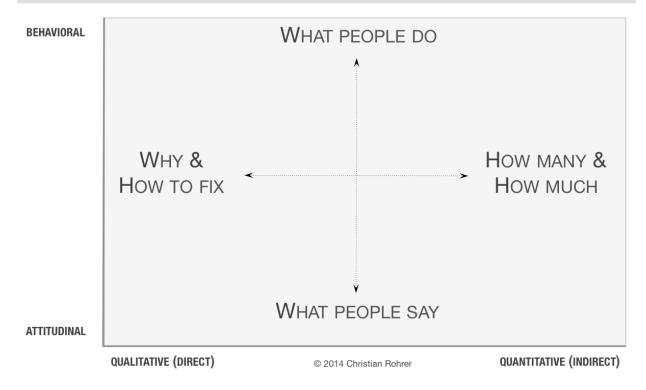
- What do you currently know?
- What don't you know?

Below is a useful visualization from the Nielsen Norman group on how to decide between which qualitative or quantitative methods to answer your research goal (Rohrer, 2014).



Surveys are great for answering the "How many and how much" of what people do and say; surveys are not the best method at understanding the "Why and how to fix" a product problem.

QUESTIONS ANSWERED BY RESEARCH METHODS ACROSS THE LANDSCAPE



1.2 Who are you studying?

This question may be simple at first, but when you start to narrow down

Chapter 2

Writing effective survey questions

Effective survey questions result in ${f consistent}$ and ${f reliable}$ responses.

Chapter 3

Survey Analysis

After you've fielded your survey, here are the steps to making sense of the data.

This section assumes you have a laptop set up to work with in either R or python. Head over to the Appendix page if you need help with set up.

3.1 Data Cleaning

Before you can begin looking at the results, you'll need to clean the data.

3.1.1 Load the data

Open your analysis tool of choice and download your raw survey data as a csv and load it into your

R version

```
#load necessary packages for analysis
library(tidyverse)

#read/store the data as the variable df (short for dataframe)
df <- read_csv(file)</pre>
```

python version

```
#load necessary modules for analysis
import pandas as pd

#read/store the data as the variable df (short for dataframe)
df = pd.read_csv(filename)
```

3.1.2 Preview the data

It's important to get a look at the data to spot an errors in uploading, etc.

Appendix A

Setting up R

A.1 Package installation

You'll want to install the following packages:

library(tidyverse)

Appendix B

Setting up python

```
# Pandas makes working with data tables easier
import pandas as pd

# Numpy is a library for working with Arrays
import numpy as np

# Module for plotting graphs
import matplotlib.pyplot as plt
import seaborn as sns

# SciPy implements many different numerical algorithms
import scipy.stats as stats
import collections

library(tidyverse)
```

Bibliography

Rohrer, C. (2014). When to use which user-experience research methods. Nielsen Norman Group.